Aerial element with a suspended stripeline between two self-supporting ground planes provided with superimposed radiating slots, and processes for its manufacture.

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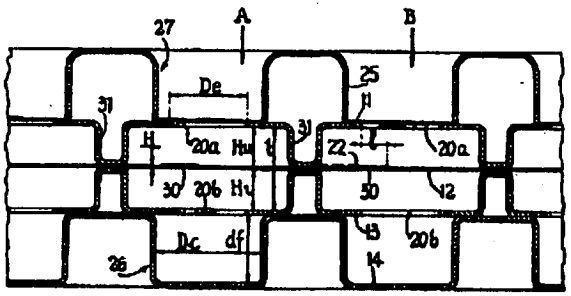
Abstract of **EP0252779**

The field of the invention is that of flat array aerials with printed supply conductors coupled to slots and radiating cavities.
The object of the invention is to provide an efficient aerial with low dimensional-tolerancing conditions.
This object is achieved in particular with the aid of an aerial module consisting of a support plate (12), an exciting conductor (22) suspended between at least two stamped ground plates (11, 13) drilled with radiating slots (20a, 20b) overlaid in pairs, and closed cavities (26) and/or open cavities (27) forming waveguides aligned ahead of and/or behind respectively at least some of the said pairs of radiating slots (20a, 20b).
The invention finds a preferred application for microwave aerials in the S- or X-band.

FIG.10



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